

## **Exhibit 2**

## Asserted Claims

### U.S. Patent No. 6,878,179

#### Claims

20. A solid fertilizer composition for plant production comprised of decontaminated manure, *Bacillus* spores, humic acid and, optionally, one or more N—P—K compounds, wherein the *Bacillus* spores are from strains of probiotic *Bacillus* bacteria that enhance beneficial microbial populations within a rhizosphere of a plant.

21. The fertilizer composition of claim 20 formulated as a complete fertilizer.

### U.S. Patent No. 7,044,994

#### Claims

1. A fertilizer composition comprised of decontaminated manure and *Bacillus* spores wherein the decontaminated manure has a total aerobic/facultative viable plate count reduced by 2-4 logs (100 to 10,000 times) compared to raw manure.

2. The fertilizer composition of claim 1 comprising a humic acid.

3. The fertilizer composition of claim 2 comprising an additive selected from the group consisting of N compounds, P compounds, K compounds, and combinations thereof.

4. The fertilizer composition of claim 3 where the decontaminated manure, the *Bacillus* spores, the additive, and the humic acid are blended into admixture resulting in a granular or powdered product.

7. The fertilizer composition of claim 1 wherein the *Bacillus* spores are from strains of probiotic *Bacillus* bacteria capable of enhancing beneficial microbial populations within a rhizosphere of a plant.

9. The fertilizer composition of claim 3 where the N

compound are selected from the group consisting of urea, ammonium sulfate, ammonium nitrate, ammonium phosphate, calcium nitrate, potassium nitrate, sodium nitrate; the P compounds are selected from the group consisting of ammonium phosphate, superphosphate, Ca(H<sub>2</sub>PO<sub>4</sub>)<sub>2</sub>, tricalcium phosphate, phosphate salts of sodium or potassium, including orthophosphate salts; and the K compounds are selected from the group consisting of KCl, potassium sulfate, potassium nitrate, and phosphate salts of potassium, including orthophosphate salts.

14. The fertilizer composition of claim 1 wherein the *Bacillus* spores are present in sufficient concentration to effect a viable spore count of between 10<sup>6</sup> cfu to 10<sup>9</sup> cfu per gram of dry composition.

23. A solid fertilizer composition for plant production comprised of decontaminated manure, *Bacillus* spores, humic acid and, optionally, one or more N P K compounds wherein the decontaminated manure has a total aerobic/facultative viable plate count reduced by 2-4 logs (100 to 10,000 times) compared to raw manure.

24. The fertilizer composition of claim 23 formulated as a complete fertilizer.

27. The fertilizer composition of claim 23 wherein the *Bacillus* spores are from strains of probiotic *Bacillus* bacteria capable of enhancing beneficial microbial populations within a rhizosphere of a plant.

**U.S. Patent No. 7,442,224**  
**Claims**

12. A method of increasing the yield of a plant while reducing the nitrogen effect, the method comprising the steps of: a) supplying to a rhizosphere of a plant a sufficient amount of a fertilizer composition comprising decontaminated manure and *Bacillus* spores to increase yield without significantly increasing the nitrogen effect; and b) maintaining contact between the rhizosphere of the plant and the composition for a time sufficient to enhance yield of the plant while reducing nitrogen effect.

14. A method of increasing concentration of beneficial non-*bacillus* organisms in a rhizosphere, the method comprising applying an effective amount of a fertilizer composition comprising **decontaminated manure** and ***Bacillus* spores** to a rhizosphere for a time sufficient to increase concentration of non-*bacillus* beneficial organisms in the rhizosphere, the non-*bacillus* beneficial organisms selected from the group consisting of actinomycetes and nitrogen fixing bacteria.